

from our application). Kariya thus does not provide much that relates to the instant invention as now claimed.

Xiong applies reactive sputtering from metallic targets in a general manner (Zn is a possible metal) and refers to the choice of the working point which is specified by FIG. 2.

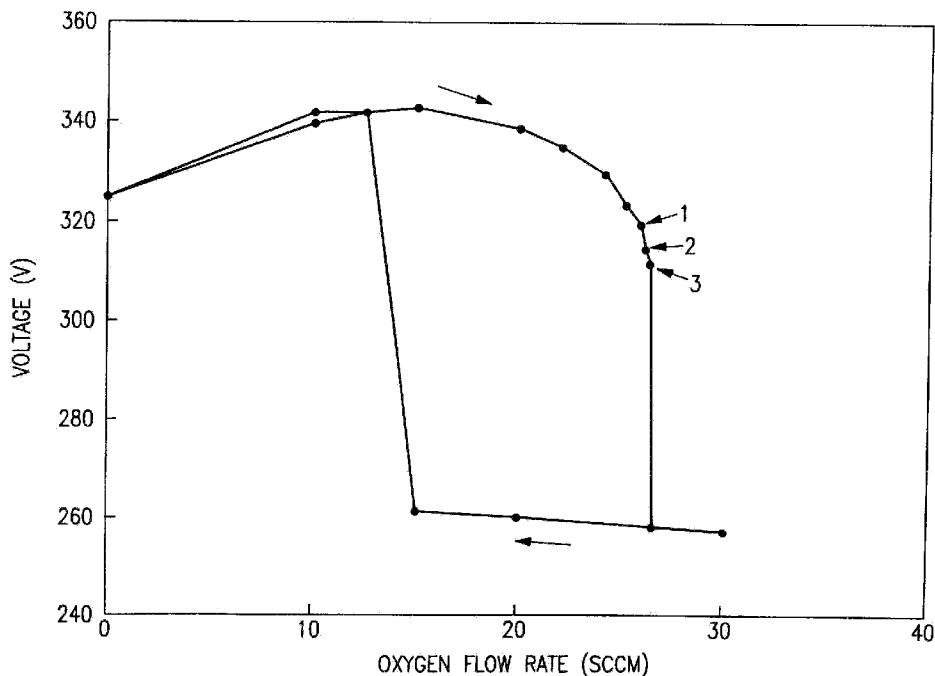


FIG.2

The curve does not provide stabilization in the transition mode and is provided to be on the upper side of the hysteresis curve in the metallic mode above the transition to the oxide mode. This working

point is different to the one given in the instant application shown in FIG. 2 of this invention

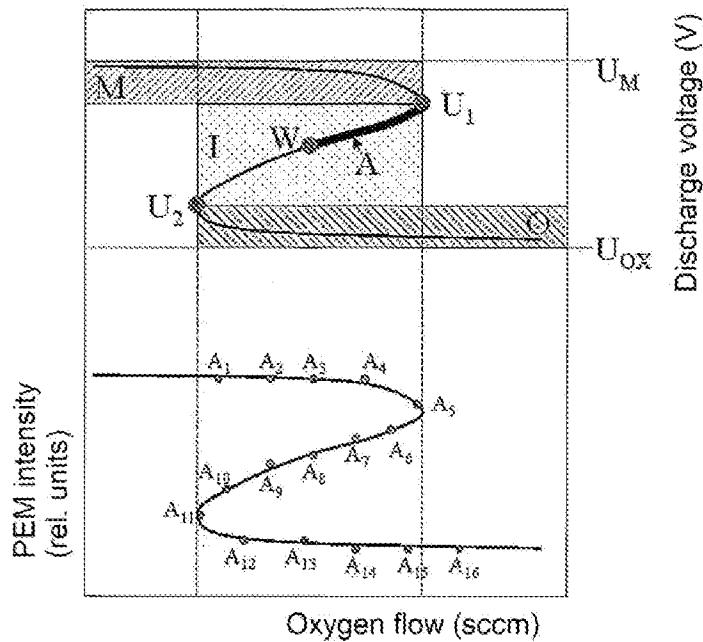


Fig. 2

Here the working point to be chosen is set in the stabilized transition zone between the point 1.7 (comparable to 3 in Xiong's graph) and the inflection point W. Xiong does not disclose the operation point being in the unstable transition zone inside the hysteresis area. Thus Xiong discloses an altogether different process.

Finally, Yamada describes a radio-frequency sputtering process for ZnO from ceramic targets, so there is no working point. This reference describes the possibility of etching ZnO in acids (paragraph 175 : "BF magnetron sputtering method under the condition that ZnO was used as sputtering target"). To create a "predetermined shape" the etching is applied through a mask to define an area for the device by total removal of the ZnO (paragraph 175 ; "The ZnO film was patterned into a predetermined shape by wet etching to achieve the piezoelectric layer"), so it is not as specifically recited in claim 20 used to create specific surface roughness, which is stated to be "equal to 11 nm, which was not more than 5% of the film thickness" (paragraph 175, see also 195). Yamada is thus not applicable because the etching of ZnO is well known as also given by Mueller cited in the instant application.

The "predetermined shape" is specified in paragraph 233: "The lift-off method was used for the patterning of the lower electrode layer 162 to achieve the lower electrode layer 162 having a predetermined shape."

In fact the rejection is a clear cut example of an assembly of references with a meticulous cherry-picking of features to reconstruct the instant invention. Whether the features that are selected are in their original disclosures for any purpose resembling what they serve in the instant invention or not is

irrelevant, all that is being done is that three complex references are culled through to find portions resembling portions of this invention, then these features are combined in a manner nowhere suggested by or obvious from the references themselves, but only to a person whose eyes have been taught by this invention. Such a retrospective rejection could probably be assembled against any application.

None of the references deals with the problem solved by the instant invention in the manner defined in the claims. The §103 rejection cobbled together from Xiong, Kariya, and Yamada would not lead the person skilled in the art to solve the problem solved by the instant invention in the manner defined in the claims. The complexly combined features of the rejection do not address the problem of this invention. The rejection must fall.

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Enclosure: None.